BULLETIN

OF

ENTOMOLOGICAL RESEARCH

ISSUED BY THE COMMONWEALTH INSTITUTE OF ENTOMOLOGY

EDITOR: THE DIRECTOR

VOL. 51

LONDON:

COMMONWEALTH INSTITUTE OF ENTOMOLOGY, 56, QUEEN'S GATE, S.W.7
1961

Commonwealth Agricultural Bureaux

EXECUTIVE COUNCIL

- C. K. REHEEM, Chairman, Pakistan
- V. ARMSTRONG, Ph.D., Vice-Chairman, New Zealand
- W. G. ALEXANDER, C.B.E., United Kingdom
- J. G. MALLOCH, M.B.E., Ph.D., Canada
- E. J. DRAKE, Australia
- J. F. Brooks, Union of South Africa
- A. M. D'ROZARIO, Ph.D., India
- A. PERERA, Ceylon

YUSOFF bin ZAINAL, Federation of Malaya

GHANA, to be nominated

FEDERATION OF NIGERIA, to be nominated

- J. E. C. COVENTRY, Federation of Rhodesia and Nyasaland
- W. A. C. MATHIESON, C.M.G., M.B.E., Colonial Territories
- Sir Thomas Scrivenor, Secretary, Farnham House, Farnham Royal, Nr. Slough, Bucks.

COMMONWEALTH INSTITUTE OF ENTOMOLOGY

Director and Editor

E. O. PEARSON, M.A.

Assistant Director

R. G. FENNAH. M.A.

Assistant Editor

W. RUTTLEDGE, M.A.

Head Office—c/o British Museum (Natural History), Cromwell Road, London, S.W.7

Publication Office and Library-56, Queen's Gate, London, S.W.7

	PAGE
Breese, M. H. The infestibility of stored paddy by Sitophilus sasakii (Tak.) and Rhyzopertha dominica (F.) (illustrated)	599
Brown, A. W. A., McKinley, D. J., Bedford, H. W. & Qutubuddin, M Insecticidal operations against Chironomid midges along the Blue Nile (illustrated)	789
Browne, S. G. Observations on Simulium neavei Roubaud, with special reference to a focus of onchocerciasis in the Belgian Congo (illustrated)	9
Burges, H. D. A spear for sampling bulk grain by suction (illustrated)	1
Burges, H. D. The effect of temperature, humidity and quantity of food on the development and diapause of Trogoderma parabile Beal (illustrated)	685
Bursell, E. The measurement of size in tsetse flies (Glossina) (illustrated)	33
Bursell, E.	33
The effect of humidity and temperature on the extent of abdominal pigmentation in Glossina pallidipes Austen (illustrated)	39
Bursell, E. The effect of temperature on the consumption of fat during pupal development in Glossina (illustrated)	583
Bursell, E. & Glasgow, J. P. Further observations on lake-side and riverine communities of Glossina palpalis fuscipes Newstead (illustrated)	47
CHAPMAN, R. F. A note on Glossina medicorum Aust. (Diptera) in Ghana (illustrated)	435
CORNWELL, P. B. Movements of the vectors of virus diseases of cacao in Ghana. II.—Wind movements and aerial dispersal (illustrated)	175
CRANHAM, J. E. Insect infestation of stored raw cocoa in Ghana (illustrated)	203
LA CROIX, E. A. S. A tria! use of grass-mat passages in protecting humans from attacks by tsetse flies	639
Das, G. M. Occurrence of the red spider, Oligonychus coffeae (Nietner), on tea in north-east India in relation to pruning and defoliation	415
Davies, H. & Blasdale, P. The eradication of Glossina morsitans submorsitans Newst. and Glossina tachinoides Westw. in part of a river flood plain in Northern Nigeria by chemical means. Part III (illustrated)	265

De Lotto, G.	PAGE
The green scales of coffee in Africa south of the Sahara (Homoptera, Coccidae) (illustrated)	389
Dobson, R. M. & Morris, M. G.	
Observations on emergence and life-span of wheat bulb fly, Leptohylemyia coarctata (Fall.), under field-cage conditions (illustrated)	803
Dunn, J. A.	
The natural enemies of the lettuce root aphid, Pemphigus bursarius (L.)	271
DUTT, N. Studies on the bionomics of the jute stem girdler, Nupserha bicolor postbrunnea Dutt (Col., Lamiidae) (illustrated)	765
EADY, R. D.	703
Pentalitomastix, a new name for Pseudolitomastix Eady (Hymenoptera, Chalcidoidea)	173
Fernando, H. E.	
A biological and ecological study of the rice Pentatomid bug, Scotinophara lurida (Burm.) (illustrated)	559
GEERING, Q. A. & COAKER, T. H.	
The effects of different plant foods on the fecundity, fertility and development of a cotton stainer, <i>Dysdercus superstitiosus</i> (F.) (illustrated)	61
(illustrated)	01
The effect of a residual house-spraying campaign in East Africa on species balance in the <i>Anopheles funestus</i> group. The replace-	
ment of A. funestus Giles by A. rivulorum Leeson (illustrated)	243
GLASGOW, J. P. The variability of fly-round catches in field studies of Glossina	781
(illustrated)	701
Seasonal variations in the fat content and size of Glossina swynn- ertoni Austen (illustrated)	705
Goma, L. K. H.	
The swamp-breeding mosquitos of Uganda: records of larvae and	
their habitats	77
GOSTICK, K. G. & HEWLETT, P. S. Killing house-flies, Musca domestica L., by means of hanging drops of insecticide (illustrated)	523
GRIFFITHS, D. C.	323
The behaviour and specificity of <i>Monoctonus paludum</i> Marshall (Hym., Braconidae), a parasite of <i>Nasonovia ribis-nigri</i> (Mosley)	
on lettuce (illustrated)	303
HANNEY, P. W. The mosquitos of Zaria Province, Northern Nigeria (illustrated)	145
HARRIS, E. Distortion of guineacorn (Sorghum vulgare) caused by a mealybug,	
Heterococcus nigeriensis Williams, in Northern Nigeria (illustrated)	677
Hocking, B.	011
An insect-proof doorway (illustrated)	135

Ingram, W. R.	PAGE
The control of yellow tea mite, Hemitarsonemus latus (Banks), with DDT on cotton in Uganda (illustrated)	577
JEPSON, W. F. & MATHIAS, P. The control of frit fly, Oscinella frit (L.), in sweet corn (Zea mays) by Thimet (O,O-diethyl S-ethylthiomethyl phosphorodithioate) (illustrated)	427
KERRICH, G. J.	
The forms of Syntomosphyrum (Hym., Eulophidae) parasitic on tsetse flies	21
KETTLE, D. S. The flight of Culicoides impunctatus Goetghebuer (Diptera, Ceratopogonidae) over moorland and its bearing on midge control (illustrated)	461
KIRBY, W. W. & BLASDALE, P. The eradication of Glossina morsitans submorsitans Newst. and Glossina tachinoides Westw. in part of a river flood plain in Northern Rigeria by chemical means. Part II (illustrated)	253
Laurence, B. R. The biology of two species of mosquito, Mansonia africana (Theobald) and Mansonia uniformis (Theobald), belonging to the subgenus Mansonioides (Diptera, Culicidae) (illustrated)	491
Leggate, B. M. & Pilson, R. D. The diurnal feeding activity of Glossina pallidipes Aust. in relation to trypanosome challenge (illustrated)	697
Lewis, D. J. Observations on the Simulium neavei complex at Amani in Tanganyika (illustrated)	95
Long, D. B. Larval movement and infestation in the wheat bulb fly, Leptohy- lemyia coarctata (Fall.) (illustrated)	405
MAELZER, D. A. The behaviour of the adult of Aphodius tasmaniae Hope (Col., Scarabaeidae) in South Australia (illustrated)	643
MILNE, A. Biology and ecology of the garden chafer, <i>Phyllopertha horticola</i> (L.). VII.—The flight season: male and female behaviour, and concluding discussion (<i>illustrated</i>)	353
Morris, K. R. S. Trapping as a means of studying the game tsetse, Glossina pallidipes Aust. (illustrated)	533
MUIR, D. A. A culture method for myrmecophilous root aphids (illustrated)	7
Norris, M. J. Group effects on feeding in adult males of the desert locust, Schistocerca gregaria (Forsk.), in relation to sexual maturation (illustrated)	7 31
ODHIAMBO, T. R. The identity of <i>Pseudodoniella laensis</i> Miller (Hemiptera, Miridae), associated with cacao in New Guinea and Papua (<i>illustrated</i>)	

	PAGE
RIVNAY, E. The life-history of the melon weevil, Baris granulipennis (Tourn.) in Israel (illustrated)	115
SAUNDERS, D. S. The "white-clubbed" form of Syntomosphyrum (Hym., Eulophidae) parasitic on tsetse flies	17
Saunders, D. S. On the stages in the development of Syntomosphyrum albiclavus Kerrich (Hym., Eulophidae), a parasite of tsetse flies (illustrated)	25
SAWICKI, R. M. A technique for the topical application of poisons to non-anaesthetised house-flies for knockdown assessments (illustrated)	715
SIMMONDS, F. J. Biological control of the coconut scale, Aspidiotus destructor Sign., in Principe, Portuguese West Africa (illustrated)	223
TAPLEY, R. G. The white coffee borer, Anthores leuconotus Pasc., and its control (illustrated)	279
VANDERPLANK, F. L. The availability of the coconut bug, Pseudotheraptus wayi Brown (Coreidae)	57
Walker, P. T. Insecticide studies on the maize stalk borer, Busseola fusca (Fuller), in East Africa (illustrated)	321
WARD, J., GILLHAM, E. M. & POTTER, C. A thermal preference method of bioassay of the toxicity of insecticidal films to house-flies (illustrated)	379
WHEATLEY, P. E. Rearing Pseudotheraptus wayi Brown (Coreidae), a pest of coconuts in East Africa, and evaluation of its susceptibility to various insecticides	723
WHITEHEAD, G. B. & BAKER, J. A. F. Acaricide resistance in the red tick, Rhipicephalus evertsi Neumann (illustrated)	755
WILLIAMS, D. J. A new species of Dysmicoccus Ferris (Pseudococcidae, Homoptera) on banana (illustrated)	239
WILLIAMS, D. J. Notes on the genus <i>Heterococcus</i> Ferris (Coccoidea, Homoptera) with a description of a new species injurious to guineacorn (Sorghum vulgare) in Nigeria (illustrated)	671
WILLIAMS, J. B. The control of black sage (Cordia macrostachya) in Mauritius: the introduction, biology and bionomics of a species of Eurytoma (Hymenoptera, Chalcidoidea) (illustrated)	123
YEO, D. & SIMPSON, H. R. The effect of repeated insecticidal applications on a natural tsetse population	631
YULE, W. N. Dieldrin lattices applied by aircraft for controlling hoppers of the red locust, Nomadacris septemfasciata (Serville) (illustrated)	441

DATES OF PUBLICATION IN PARTS

Part I pp. 1-222		21 April 1960
Part II pp. 223-414		29 July 1960
Part III pp. 415-638	•••	30 November 1960
Part IV pp. 639-822		31 January 1961

ERRATA

- Page 23, line 6, for "pallidipes" read "palpalis"
- Page 74, 16 lines from end, omit "the"
- Page 75, line 5, for "accessary" read "accessory"
- Page 77, line 23 and page 78, line 16, for "A. marshalli var. gibbinsi" read "A. marshallii var. gibbinsi"
- Page 110, line 1, for "Simulium neavi" read "Simulium neavei"
- Page 110, 4 lines from end, for "indentifying" read "identifying"
- Page 160, fig 8, 2nd col., for "M. africanus" read "M. africana"
- Page 387, line 11, for "0.65" read "0.69"
- Page 441, line 1, for "Nomadacris semptemfasciata" read "Nomadacris septemfasciata"
- Page 495, line 46, after "starved" insert "of a blood-meal"
- Page 684, line 4, for "other" read "otherwise"
- Page 723, line 1 (title), insert comma after "(Coreidae)"